

The Lab Startup Checklist

A pre-operational guide from the Science Exchange Virtual Lab Manager team — three sections, one lab that's ready to run science.

Before you start

The operational foundation for a new lab takes more coordination than most founders expect.

Who this is for: Founders and lab managers at early-stage biotech companies standing up a new lab.

When to start: As early as possible — ideally before you sign a lease. Several items have lead times or retroactivity rules that make early action essential.

What's inside: Three sections in sequence: business readiness, lab space, and initial equipment.

Drawn from the VLM team's first-hand experience across various early-stage lab launches.

SECTION 1

Business Readiness

Get this right before you place a single order. The administrative groundwork that founders consistently underinvest in.

Documentation

/4

W-9 prepared and saved somewhere accessible to the team

Business license obtained

Signed lease (first and last page) saved and accessible

Credit reference letter obtained

May need assistance from bank or established business partner to create

Email and Communication /3

Dedicated purchasing email address created
Separate from personal accounts

Dedicated invoicing/accounting email address created

Dedicated team members assigned to each inbox

Purchase Tracking System /3

PO system established
Software or structured spreadsheet with sequential numbering

Sequential PO numbering convention documented and shared with team

Every order is assigned a PO number before it is placed

Tax Exemptions /2

Tax exemption eligibility confirmed with accountant
Varies by state, entity type, and purchase use

State sales tax exemption certificates filed with suppliers
Before placing orders — cannot be applied retroactively

Approval Structure and Budgets /2

Purchasing approval thresholds defined
Who can authorize what, at what dollar amount

Roles assigned and documented, including backups

Overall lab operating budget set

Project-level budget process established

Startup Discount Programs /4

Thermo Fisher new lab / startup discount program application submitted

VWR new lab / startup discount program application submitted

MilliporeSigma new lab / startup discount program application submitted

Relevant trade group memberships explored for additional pricing and distributor benefits
e.g. MassBio, CLS, Biocom



SECTION 2

Lab Space

What needs to happen before equipment arrives. Don't assume your space is ready just because it looks full.



Start these the day you sign the lease; lead times are typically 4–6 weeks.

If you are leasing a space in an incubator facility, these accounts may be handled by the incubator.

Know What You're Working With

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Incubator / shared space secured OR own space leased

Complete list of building-provided services collected

e.g. janitorial, hazardous waste collection, consumables stockroom, internet, shared equipment, conference rooms.

If services are not provided by your building, you'll need to establish them.

Floor plan reviewed and evaluated for equipment locations and fit

Pay close attention to available outlets, water lines, etc.

Utilities and Gas Accounts

/7

Electrical capacity confirmed for planned equipment load

Dedicated circuits identified for high-draw equipment

Biosafety cabinets, high-draw centrifuges, -80°C freezers

Electrical service account initiated

HVAC capacity confirmed for planned equipment and headcount

Liquid nitrogen, dry ice, compressed air, and gas account setup initiated

Slow to establish; start immediately

Gas lines confirmed available and adequate

If leased space

Water supply connections confirmed

Location and capacity



Physical Logistics Audit

/4

Loading dock access confirmed

Hours, restrictions, delivery vehicle size limits

Freight elevator, delivery door, and hallway dimensions measured

Before ordering any large equipment

Delivery and receiving procedures confirmed with building management

Person identified on your team to coordinate receiving

Infrastructure

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Benches installed and load-rated for planned equipment

Shelving installed

Proper storage solutions in place

Chemical, cold, dry

Safety infrastructure in place

Eyewash stations, fire extinguishers, first aid — confirm requirements with building

Equipment monitoring options evaluated for -80°C freezers and CO₂ incubators

SECTION 3

The Minimal Viable Lab

What you actually need first. Start with what's required to run your first experiment. Don't get distracted trying to plan for everything you may eventually need.

Equipment Planning

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Equipment list created with catalog numbers, potential suppliers, and brief descriptions

Long-lead-time items identified

Anything with >2 week lead time — order immediately

Critical single-source items identified

Items with no acceptable alternative — secure supply first

1–2 backup suppliers identified for everything else

Near-Universal Equipment Essentials

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Although equipment needs will vary with your specific science, these apply to most early-stage biotech labs

Cold storage ordered

Refrigerator, -20°C freezer, and/or -80°C freezer

CO₂ incubator(s) ordered

Pipettes ordered (with adequate tip supply)

Centrifuges ordered

Thermal cycler ordered

If PCR is part of your work

Water bath and/or bead bath ordered

Biosafety cabinet or flow hoods ordered

If cell culture or biological work is planned

Deionized (DI) water system ordered



Supplies and Consumables

/3

Initial consumables list created

e.g. tips, tubes, gloves, media, reagents. Don't overlook small things like lab notebooks, tube racks, labels, etc.

Initial order placed with adequate buffer stock

Inventory tracking system established early

Can be as simple as a spreadsheet

Vendor Accounts and Relationships

/6

Primary distributor account established

e.g. ThermoFisher, VWR, Quarty — take advantage of new lab programs

Chemical supplier account established

e.g. Sigma Aldrich

Direct manufacturer accounts opened for any critical single-source items

Specialty supplier accounts opened as needed for your specific science

Preferred vendor list documented and shared with anyone who can place orders

Vendor account numbers and login information stored in a secure password manager

Safety officer designated

Waste disposal service arranged

Chemical, biological, sharps — as applicable to your work

Safety training completed or scheduled for all lab personnel

Compliance consultant engaged

If no in-house expertise, especially for state licenses

State licenses confirmed or applied for

Lab insurance confirmed

Your Summary

Go back to any section to keep checking things off.

Section 1 — Business Readiness

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Section 2 — Lab Space

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Section 3 — Minimal Viable Lab

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Total

/66

Running a lab is a real job.
The VLM team can do it for you.

The Science Exchange Virtual Lab Manager team works with early-stage biotech companies on exactly this: procurement setup, vendor relationships, and the ongoing operational work that keeps labs moving. If you'd rather have an experienced operator handling this so your scientists can stay focused on the science, that's what VLM is built for.

[Talk to the VLM Team](#)